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	20	9	Harman, G. E.,	"Myths and I	Dogmas of Bioc	ontrol. Changes	in Perceptions Based	on Research v	with <i>Trichoderma hi</i>	arzianum		
	101		T-22," Plant D	<u>is.</u> 84: 377-39	3 (2000)							
	1	10	Harman et al.,	"Factors Affe	ting Trichoder	na hamatum App	lied to Seeds As a Bio	ocontrol-Ager	nt," Phytopathology	71: 569-572		
:	20		(1981)				3					
		11	Taylor et al., "t	Concepts and	Technologies of	Selected Seed T	reatments," <u>Ann. Rev</u>	. Phytopathol	<u>.</u> 28: 321-339 (1990	)		
	m											
	1	12	Lo et al., "Biol	ogical Contro	of Turfgrass D	iscases With a R	hizosphere Competent	t Strain of <i>Tri</i>	choderma harzianu	m," <u>Plant</u>		
	m		<u>Dis.</u> 80:736-74	1(1996)		<u></u>						
		13 -	Lo et al., "Impi	roved Biocont	rol Efficacy of 2	Trichoderma har	zianum 1295-22 For F	oliar Phases	of Turf Diseases By	Use of		
	m		Spray Applicat	ions," Plant D	<u>is.</u> 81:1132-113	8 (1997)						
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		<u> </u>			can Washington, D. C. (1993)	2-114 Matrix Drimi	to Improve Riole	-ical Sand			
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				631-637 (1989)	Colorination of DI	. Dt- bu Doot	'- " Can I Misroh	-1 20.			
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_	23	Weiler, D.M., '	'Biological C	Control of Soilborne	Plant Pathogens is	n the Rhizospher	re with Bacter	ria," <u>Ann. Rev. Phyto</u>	pathol.,			
m		26:379-407 (19	88)									
	24	Taylor et al, "L	Liquid Coating Formulation for the Application of Biological Seed Treatments of Trichoderma harzianum," Biol.									
m		Control 1:16-22	2 (1991)	(1991)								
7	25	Chang et al., "I	ncreased Gro	wth of Plants in the	Presence of the B	Biological Contro	ol Agent Trick	hoderma harzianum,"	' Plant Dis.			
M		70:145-148 (19	86)									
m	26	Windham et al.	., "A Mechan	ism For Increased F	Plant Growth Indu	ced By Trichode	rma spp.," P	hytopath. 76:518-521	(1986)			
in		<u> </u>										
<u></u>	27	Yedidia et al., '	'Induction of	f Defense Responses	s in Cucumber Pla	nts (Cucumis sat	tivus L.) by th	e Biocontrol Agent				
m		Trichoderma h	arzianum," A	Appl. Environ, Micro	obiol. 65:1061-10	70 (1999)	<del></del>					
0	28	Deacon, J. W.,	"Rhizospher	c Constraints Affec	ting Biocontrol Or	rganisms Applier	d to Seeds," it	n: BCPC Mongraph	57: Seed			
n		Treatment: Pro	gress and Pro	ospects., pp. 315-32	6, T. Martin, ed. F	3ritish Crop Prote	ection Counc	il, Famham, UK. (199	94)			
7	29	da Luz et al., "	Seed-Applied	d Bioprotectants For	Control of Seedb	orne Pyrenophoi	ra tritici-repe	entis and Agronomic	Enhancement			
/		of Wheat," Car	a. J. Plant Pat	thol. 19:384-386 (19	<del>)</del> 98)							
1	30	Datnoff et al, "	Biological C	ontrol of Fusarium	Crown and Root F	Rot of Tomato in	Florida Usin	g Trichoderma harzi	anum and			
		Glomus intrare	idices," Biol.	. Contr. 5:427-431 (	1995)							
J	31	Nemec et al., "	Efficacy of F	Biocontrol Agents in	Planting Mixes to	o Colonize Plant	Roots and C	ontrol Root Diseases	of			
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De Freitas et al., "Growth Promotion of Winter Wheat by Fluorescent Pseudomonads Under Growth Chamber Conditions,"  Soil Biology and Biochemistry 24:1127-1135 (1992)  Dubey et al., "influence of Fast and Slow Growing Rhizobia on Growth and Yield of Soybean (Glycine max)," Indian  Journal of Plant Physiology 5:285-287 (2000)  Germida et al., "Plant Growth-Promoting Rhizobacteria After Rooting Patterns and Arbuscular Mycorrhizal Fungi  Colonization of Field-Grown Spring Wheat," Biology and Fertility of Soils 23:113-120 (1996)  Harman et al., "Plant Growth Promotion by Trichoderma harzianum," Helsinki Trichoderma/Gliocladium Workshop Abstract  (June 1999) (abstract only)  Bioworks, Inc., "Properties of T-22 <sup>TM</sup> PB," Bioworks, Inc. T-22 <sup>TM</sup> PB Tech Update Bulletin (April 2000)  Altomare et al., "Solubilization of Phosphates and Micronutrients by the Plant-growth Promoting and Biocontrol Fungus  Trichoderma harzianum Rifai 1295-22," Appl. Env. Microbiol. 65-2926-2933 (1999)  Bailey et al., "Direct Effects of Trichoderma and Gliocladium on Plant Growth and Resistance to Pathogens," in Trichoderma  and Gliocladium 2:185-204, Harman and Kubicek, eds., Taylor and Francis, London (1998)  Baker et al., "Physical, Biological and Host Factors in Iron Competition in Soils," in Iron, Siderophores and Plant Diseases, pp.  77-84, T. R. Swinburne, ed. Plenum Press, New York (1986)												
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Soil Biology and Biochemistry 24:1127-1135 (1992)  Dubey et al., "Influence of Fast and Slow Growing Rhizobia on Growth and Yield of Soybean (Glycine max)," Indian  Journal of Plant Physiology, 5:285-287 (2000)  Germida et al., "Plant Growth-Promoting Rhizobacteria After Rooting Patterns and Arbuscular Mycorrhizal Fungi  Colonization of Field-Grown Spring Wheat," Biology and Fertility of Soils 23:113-120 (1996)  Harman et al., "Plant Growth Promotion by Trichoderma harzianum," Helsinki Trichoderma/Gliocladium Workshop Abstract  (June 1999) (abstract only)  Bioworks, Inc., "Properties of T-22 <sup>TM</sup> PB," Bioworks, Inc. T-22 <sup>TM</sup> PB Tech Update Bulletin (April 2000)  Altomare et al., "Solubilization of Phosphates and Micronutrients by the Plant-growth Promoting and Biocontrol Fungus  Trichoderma harzianum Rifai 1295-22," Appl. Env. Microbiol. 65:2926-2933 (1999)  Balley et al., "Direct Effects of Trichoderma and Gliocladium on Plant Growth and Resistance to Pathogens," in Trichoderma  and Gliocladium 2:185-204, Harman and Kubicek, eds., Taylor and Francis, London (1998)  Baker et al., "Physical, Biological and Host Factors in Iron Competition in Soils," in Iron, Siderophores and Plant Diseases, pp.  77-84, T. R. Swinburne, ed. Plenum Press, New York (1986)  XMMINER  Local Solution of Fast and Slow Growing Rhizobia on Growth and Resistance to Pathogens," in Trichoderma  Both Considered in Iron, Siderophores and Plant Diseases, pp.  DATE CONSIDERED  3/10/04	-		отн	ER DOCUM	ENTS (including	Author, Title, D	ate, Pertinent Page	es, Etc.)				
Dubey et al., "Influence of Fast and Slow Growing Rhizobia on Growth and Yield of Soybean (Glycine max)," Indian    Journal of Plant Physiology 5:285-287 (2000)   Journal of Plant Physiology 5:285-287 (2000)   Germida et al., "Plant Growth-Promoting Rhizobacteria After Rooting Patterns and Arbuscular Mycorrhizal Fungi   Colonization of Field-Grown Spring Wheat," Biology and Fertility of Soils 23:113-120 (1996)   Harman et al., "Plant Growth Promotion by Trichoderma harzianum," Helsinki Trichoderma/Gliocladium Workshop Abstract   (June 1999) (abstract only)   36		32	De Freitas et al	., "Growth Pr	omotion of Winte	r Wheat by Flu	orescent Pseudomo	onads Uno	ler Gro	wth Chamber Cond	itions,"	
Journal of Plant Physiology 5:285-287 (2000)  Germida et al., "Plant Growth-Promoting Rhizobacteria After Rooting Patterns and Arbuscular Mycorrhizal Fungi Colonization of Field-Grown Spring Wheat," Biology and Fertility of Soils 23:113-120 (1996)  Harman et al., "Plant Growth Promotion by Trichoderma harzianum," Helsinki Trichoderma/Gliocladium Workshop Abstract (June 1999) (abstract only)  Bioworks, Inc., "Properties of T-22 <sup>TM</sup> PB," Bioworks, Inc. T-22 <sup>TM</sup> PB Tech Update Bulletin (April 2000)  Altomare et al., "Solubilization of Phosphates and Micronutrients by the Plant-growth Promoting and Biocontrol Fungus Trichoderma harzianum Rifai 1295-22," Appl. Env. Microbiol. 65:2926-2933 (1999)  Bailey et al., "Direct Effects of Trichoderma and Gliocladium on Plant Growth and Resistance to Pathogens," in Trichoderma and Gliocladium 2:185-204, Harman and Kubicek, eds., Taylor and Francis, London (1998)  Baker et al., "Physical, Biological and Host Factors in Iron Competition in Soils," in Iron, Siderophores and Plant Diseases, pp. 77-84, T. R. Swinburne, ed. Plenum Press, New York (1986)  XAMINER  LOCATION STATEMENT STATEME	m_		Soil Biology at	nd Biochemis	ry 24:1127-1135	(1992)						
Germida et al., "Plant Growth-Promoting Rhizobacteria After Rooting Patterns and Arbuscular Mycorrhizal Fungi Colonization of Field-Grown Spring Wheat," Biology and Fertility of Soils 23:113-120 (1996)  Harman et al., "Plant Growth Promotion by Trichoderma harzianum," Helsinki Trichoderma/Gliocladium Workshop Abstract  [Jünc 1999] (abstract only)  Bioworks, Inc., "Properties of T-22TM PB," Bioworks, Inc. T-22TM PB Tech Update Bulletin (April 2000)  Altomare et al., "Solubilization of Phosphates and Micronutrients by the Plant-growth Promoting and Biocontrol Fungus  Trichoderma harzianum Rifai 1295-22," Appl. Env. Microbiol. 65-2926-2933 (1999)  Bailey et al., "Direct Effects of Trichoderma and Gliocladium on Plant Growth and Resistance to Pathogens," in Trichoderma and Gliocladium 2:185-204, Harman and Kubicek, eds., Taylor and Francis, London (1998)  Baker et al., "Physical, Biological and Host Factors in Iron Competition in Soils," in Iron, Siderophores and Plant Diseases, pp.  77-84, T. R. Swinburne, ed. Plenum Press, New York (1986)  XAMINER  DATE CONSIDERED  3/10/04	0	33	Dubey et al., "I	"Influence of Fast and Slow Growing Rhizobia on Growth and Yield of Soybean (Glycine max)," Indian								
Colonization of Field-Grown Spring Wheat," Biology and Fertility of Soils 23:113-120 (1996)  Harman et al., "Plant Growth Promotion by Trichoderma harzianum," Helsinki Trichoderma/Gliocladium Workshop Abstract  (June 1999) (abstract only)  Bioworks, Inc., "Properties of T-22 <sup>TM</sup> PB," Bioworks, Inc. T-22 <sup>TM</sup> PB Tech Update Bulletin (April 2000)  Altomare et al., "Solubilization of Phosphates and Micronutrients by the Plant-growth Promoting and Biocontrol Fungus  Trichoderma harzianum Rifai 1295-22," Appl. Env. Microbiol. 65:2926-2933 (1999)  Bailey et al., "Direct Effects of Trichoderma and Gliocladium on Plant Growth and Resistance to Pathogens," in Trichoderma and Gliocladium 2:185-204, Harman and Kubicek, eds., Taylor and Francis, London (1998)  Baker et al., "Physical, Biological and Host Factors in Iron Competition in Soils," in Iron, Siderophores and Plant Diseases, pp.  77-84, T. R. Swinburne, ed. Plenum Press, New York (1986)  DATE CONSIDERED  3/10/04	m		Journal of Plan	ant Physiology 5:285-287 (2000)								
Harman et al., "Plant Growth Promotion by Trichoderma harzianum," Helsinki Trichoderma/Gliocladium Workshop Abstract  [Junc 1999] (abstract only)  Bioworks, Inc., "Properties of T-22 <sup>TM</sup> PB," Bioworks, Inc. T-22 <sup>TM</sup> PB Tech Update Bulletin (April 2000)  Altomare et al., "Solubilization of Phosphates and Micronutrients by the Plant-growth Promoting and Biocontrol Fungus  Trichoderma harzianum Rifai 1295-22," Appl. Env. Microbiol. 65:2926-2933 (1999)  Bailey et al., "Direct Effects of Trichoderma and Gliocladium on Plant Growth and Resistance to Pathogens," in Trichoderma  and Gliocladium 2:185-204, Harman and Kubicek, eds., Taylor and Francis, London (1998)  Baker et al., "Physical, Biological and Host Factors in Iron Competition in Soils," in Iron, Siderophores and Plant Diseases, pp.  77-84, T. R. Swinburne, ed. Plenum Press, New York (1986)  DATE CONSIDERED  3/10/04	$\alpha$	34	Germida et al.,	il., "Plant Growth-Promoting Rhizobacteria After Rooting Patterns and Arbuscular Mycorrhizal Fungi								
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Trichoderma harzianum Rifai 1295-22," Appl. Env. Microbiol. 65:2926-2933 (1999)  Bailey et al., "Direct Effects of Trichoderma and Gliocladium on Plant Growth and Resistance to Pathogens," in Trichoderma and Gliocladium 2:185-204, Harman and Kubicek, eds., Taylor and Francis, London (1998)  Baker et al., "Physical, Biological and Host Factors in Iron Competition in Soils," in Iron, Siderophores and Plant Diseases, pp. 77-84, T. R. Swinburne, ed. Plenum Press, New York (1986)  XAMINER  Luce  DATE CONSIDERED  3/10/04	m	36	Bioworks, Inc.	, "Properties (	of T-22™ PB," <u>Bi</u>	ioworks, Inc. T-	22™ PB Tech Up	date Bulle	<u>tin</u> (Ap	oril 2000)		
Bailey et al., "Direct Effects of Trichoderma and Gliocladium on Plant Growth and Resistance to Pathogens," in Trichoderma and Gliocladium 2:185-204, Harman and Kubicek, eds., Taylor and Francis, London (1998)  Baker et al., "Physical, Biological and Host Factors in Iron Competition in Soils," in Iron, Siderophores and Plant Diseases, pp.  77-84, T. R. Swinburne, ed. Plenum Press, New York (1986)  DATE CONSIDERED 3/10/04	02	37	Altomare et al.	, "Solubilizat	on of Phosphates	and Micronutri	ents by the Plant-g	rowth Pro	moting	and Biocontrol Fu	ngus	
and Gliocladium 2:185-204, Harman and Kubicek, eds., Taylor and Francis, London (1998)  Baker et al., "Physical, Biological and Host Factors in Iron Competition in Soils," in Iron, Siderophores and Plant Diseases, pp.  77-84, T. R. Swinburne, ed. Plenum Press, New York (1986)  XAMINER  Luce  DATE CONSIDERED  3/10/04	14		Trichoderma h	arzianum Rif	ai 1295-22," <u>App</u> l	. Env. Microbio	<u>1.</u> 65:2926-2933 (	1999)				
Baker et al., "Physical, Biological and Host Factors in Iron Competition in Soils," in Iron, Siderophores and Plant Diseases, pp.  77-84, T. R. Swinburne, ed. Plenum Press, New York (1986)  DATE CONSIDERED  3/10/04		38	Bailey et al., "l	Direct Effects	of Trichoderma a	and Gliocladium	on Plant Growth	and Resis	tance to	Pathogens," in Tri	choderma	
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	40	Young et al., "	PGPR: Is The	re a Relationship I	Between Plant	Growth Regulators	and the	Stimulat	tion of Plant Grov	vth or		
m		Biological Act	ical Activity?" in Plant Growth-Promoting Rhizobacteria: Progress and Prospects, Keel et al, eds. pgs. 182-186, Interlaken									
10		Switzerland (1	zerland (1991)									
- m	41	Di Pietro et al.	al., "Endochitinase from Gliocladium virens: Isolation, Characterization, and Synergistic Antifungal Activity in									
<i>/</i> /(					<u>stopathology</u> 83:308-313 (1993)							
. M	42	Graham et al.,	"Micronutrier	its and Disease Res	sistance and T	olerance in Plants,"	in: Mic	ronutrie	nts in Agriculture			
701	<u> </u>		·	d. Soil Sci. Soc. A								
$\Omega_{\Lambda}$	43	Harman et al.,	"Improved Se	edling Performanc	e by Integration	on of Biological Con	trol Ágo	nts at Fa	avorable pH Leve	ls with Solid		
γω,			· <del></del>	ology 78:520-525 (	· · · · · · · · · · · · · · · · · · ·							
20	44	Harman et al.,	"Developmen	t of an Effective B	iological Seed	Treatment System,	" in: <u>Bio</u>	logical (	Control of Soil-bo	me Plant		
	<u> </u>	Pathogens, pp.	415-426, D. I	Hornby, ed., CAB I	International,	Oxon, UK (1990)						
m	45	Schroth et al.,	*Disease-Supp	oressive Soil and R	Loot-Colonizir	g Bacteria," <u>Science</u>	216:13	176-1381	1 (1982)			
0-	46	Heckman et al.	, "Com Respo	onse to Sidedress N	Vitrogen in Re	lation to Soil Nitrate	Analysi	is," Com	mun. Soil Sci. Pl	ant Anal.		
m		27:575-583 (19	996)									
	47	Lewis et al., "/	New Approx	ach to Stimulate Po	opulation Proli	feration of Trichode	rma Spe	cies and	Other Potential	Biocontrol		
m		Fungi Introduc	ed Into Natura	al Soils," Phytopati	hology 74:124	0-1244 (1984)						
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				c Interaction Between Cell Wall Degrading Enzymes and Membrane Affecting Compounds," <a href="https://doi.org/10.2006/j.com/person-news/">https://doi.org/10.2006/j.com/person-news/</a> Rhizosphere Competence in a Protoplast Fusion Progeny of Trichoderma harzianum.," J. Gen. Microbiol.							
	50	<del> </del>									
		137:23-29 (199									
	51	Zeilinger et al.	, "Chitinase G	ene Expression Du	uring Mycopar	asitic Interaction of	Trichoder	ma har	zianum With its H	lost,"	
		Fung, Genet. E	Biol. 26:131-1	40 (1999)				-			
	52	Kloepper et al.	, "Effects of I	hizosphere Coloni	zation by Plan	nt Growth-Promoting	Rhizoba	cteria o	n Potato Plant-De	velopment and	
		Yield," Phytop	athology 70:1	078-1082 (1980)							
	53	Kloepper et al.	, "Plant Grow	th Promotion Med	iated by Rhizo	sphere Bacterial Col	lonizers,"	in <u>The</u>	Rhizosphere and	Plant Growth,	
<b>l</b> /	İ	pp. 315-326, K	Leister et al. (e	ds), Kluwer Acade	mic Publisher	s, The Netherlands (	1991)				
	54	Lifshitz et al.,	"Growth Pron	notion of Canola (r	apesced) Seed	lings by a Strain of F	Pseudomo	nas pu	tida Under Gnotob	oiotic	
	•	Conditions," C	an. J. Microb	iol. 33:390-395 (19	87)			_			
	55	Liu et al., "Ind	uction of Syst	emic Resistance in	Cucumber A	gainst Bacterial Angu	ular Leaf	Spot by	Plant Growth-Pro	omoting	
		Rhizobacteria,	" Phytopathol	ogy 85:843-847 (1	995)						
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M	62	Loper et al., "li	nfluence of B	acterial Sources	of Indole-3-Ace	tic Acid on Root E	longation	of Sugar	Beet,"		
04		Phytopatholog	× 76:386-389	(1986)							
	63	Anderson et al	, "Responses	of Bean to Root	Colonization w	th Pseudomonas p	outida in a	Hydropo	onic System," Phyt	opathology	
		75(9):992-95 (									
	64	<del></del>			ition by Antibio	tic-Producing Fluc	orescent Ps	eudomo	nads on Citrus Roc	ots,"	
		Plant and Soil						<del></del>			
	65		<del>-</del>						Populations of-Er	winia	
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	66	Kloepper et al.	, "Plant Grow	th-Promoting RI	hizobacteria on (	Canola (Rapeseed)	," <u>Plant Di</u>	<u>sease</u> 72	(1):42-6 (1988)		
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	67			Plant Growth by	Siderophores Pr	oduced by Plant G	rowth-Pro	moting I	Rhizobacteria," Na	ture	
	-	286:885-86 (19									
	68					ription and Implic		Agricult	ure," In:		
						ım, NY, 155-64 (1					
	69			<u> </u>	<del></del>		Rhizobac	teria to I	Plant Growth and the	ne	
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01.	70 -	Qui et al., "Tre	eatment of Te	omato Seed with H	arpin Enhances Germination a	nd Growth	and Ind	uces Resistance to				
70		Ralstonia solan	olanacearum," Phytopathology 87: S80 (1997) (abstract only)  " "Potential for Biological Control of Phytophthora Root and Crown Rots of Apple by Trichoderma and									
	71	Smith et al., "F										
.		Gliocladium sp	p.," Phytopa	thology_80:_880-88	35 (1991)	4 15	~= <del></del>	11-7/11-77-7				
	72	Wei et al., "Inc	induced Systemic Resistance to Cucumber Diseases and Increased Plant Growth by Plant Growth-Promoting									
		Rhizobacteria U	Jnder Field (	Conditions," Phyto	pathology 86:221-224 (1996).							
	73	Ahmad et al., "	Rhizosphere	Competence of Tric	choderma harzianum," Phytop	athology, 7	7:182-1	89 (1987)				
	74	Stasz et al., "Pr	otoplast Prep	paration and Fusion	in Two Biocontrol Strains of 7	richoderma	Harzia	mum," Mycologia,	80:141-150			
)		(1988)										
1/	75	Wei et al., "Ind	uced System	ic Resistance by Se	lect Plant Growth-Promoting R	thizobacteri	ia Again	st Bacterial Wilt of	ſ			
W		Cucumber and	the Beetle Ve	ectors," Phytopatho	logy, 86:1154, Abstract No. 31	3 (1995)						
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